WHAT IS CLAIMED IS:

1. A method for manufacturing a lead body comprising the steps of:

preparing a first layer unitary body comprising a first plurality of conductors;

placing at least one conductor of a second plurality of conductors on said first layer unitary body; and

forming a lead body assembly, wherein the formed lead body assembly comprises a unitary wall and wherein the first plurality of conductors and the at least one conductor of a second plurality of conductors are within the unitary wall.

2. The method as claimed in Claim 1 wherein the forming step further comprises using extrusion material in the lead body assembly.

3. The method as claimed in Claim 1 wherein the at least one conductor of a second plurality of conductors is coated with a first extrusion material.

4. The method as claimed in Claim 1 further comprising the step of placing an inner extrusion layer on the first layer unitary body.

5. The method as claimed in Claim 1 further comprising the step of placing an outer extrusion layer on the at least one conductor of a second plurality of conductors.

6. The method as claimed in Claim 4 further comprising the step of placing an outer extrusion layer on the at least one conductor of a second plurality of conductors.

7. The method as claimed in Claim 6 wherein the inner extrusion layer and the outer extrusion layer are comprised of the same extrusion material.

8. The method as claimed in Claim 1 wherein the step of preparing further comprises the step of placing the first layer unitary body comprising a first plurality of conductors on a mandrel.

9. The method as claimed in Claim 2 wherein the forming step further comprises the steps of:

placing heat shrink tubing over the lead body assembly;

heating the lead body assembly to melt the extrusion material in the lead body assembly;

compressing the melted extrusion material around the at least one conductor of the second plurality of conductors in the lead body assembly;

cooling the lead body assembly to form the lead body; and

removing the heat shrink tubing from the lead body.

10. A lead for implantation into a human body, the lead comprising:

a unitary lead body assembly comprising:

a unitary wall having an inner portion that forms a lumen;

an inner layer having at least one conductor; and

an outer layer having at least one conductor, wherein the inner layer and the outer layer are within the unitary wall;

at least one electrode located at a distal end of the lead body; and

at least one connector located at a proximal end of the lead body, wherein the at least one connector and the at least one electrode are connected by at least one conductor.

11. The lead as claimed in Claim 10 wherein the unitary wall is comprised of extrusion material.

12. The lead as claimed in Claim 10, wherein no electrical insulation material is between the conductors and the unitary wall.

13. The lead as claimed in Claim 10, wherein the diameter of the lead is no greater than 34 French.

14. The lead as claimed in Claim 13, further comprising at least five electrodes.

15. A system for stimulating a portion of a body, wherein the system comprises:

a source for generating a stimulus; and

a lead for receiving the stimulus from the source, wherein the lead comprises:

a unitary lead body assembly comprising:

a unitary wall having an inner portion that forms a lumen;

an inner layer having at least one conductor; and

an outer layer having at least one conductor, wherein the inner layer and the outer layer are within the unitary wall;

at least one electrode located at a distal end of the lead body; and

at least one connector located at a proximal end of the lead body, wherein the at least one connector and the at least one electrode are connected by at least one conductor.

16. The system as claimed in Claim 15, wherein the unitary wall comprises extrusion material.

17. The system as claimed in Claim 15, wherein no electrical insulation material is between the conductors and the

unitary wall.

18. The system as claimed in Claim 15, wherein the diameter of the lead is no greater than 34 French.

19. The system as claimed in Claim 15, wherein the lead comprises at least five electrodes.

20. The system as claimed in Claim 15 wherein the conductors are spirally wound around the lumen.